## **Orthophotography Project 2003-2005**

Collection of this high resolution imagery was one of the major projects to date by the Maine GeoLibrary Board. The project was a \$3.2M project to create, in cooperation with the U.S. Geological Survey (USGS), full color, high resolution digital orthophotos for most of the populated areas of Maine. A digital orthophoto, or orthoimage, is a digital image of an aerial photograph in which displacements caused by the camera and the terrain have been removed. It combines the image characteristics of a photograph with the geometric qualities of a map so that features are displayed in their true ground position. Orthophotos are often used as a backdrop in a Geographic Information System (GIS) and as the base for creation or update of vector mapping data. They also display features that may be omitted on a standard map.

The following map titled "Existing & Proposed Orthoimage Production Revised Sept. 20, 2005" shows the original proposed orthophoto coverage and subsequent changes in the project. The orange shaded area labeled "Ortho\_HF" is purchased, color orthoimagery covering all of Cumberland and part of Androscoggin counties. This was flown in the spring of 2001 and has a pixel resolution of ½ foot. The town of Fort Fairfield, labeled "Ortho\_FF" donated color orthoimagery flown in the spring of 2003 with a pixel resolution of ½ foot.

The red shaded areas, labeled "Tier A", were flown at a photoscale of 1 inch = 1,000 feet in the spring of 2003, 2004 and 2005. They were produced as natural color orthoimages with a pixel resolution of 1 foot.

The yellow shaded areas, labeled "Tier B", were flown at a photoscale of 1 inch = 2,000 feet in the spring of 2003, 2004 and 2005. They were produced as natural color orthoimages with a pixel resolution of 2 feet. Unfortunately, due to budget constraints, not all of the Tier B orthoimages were produced under this contract.

The green shaded areas, labeled "Tier C" were not flown as part of this project. These areas are covered by existing black and white orthoimages flown in 1996-1998 at a pixel resolution of 1 meter. The National Agricultural Imagery Program (NAIP) orthophotography covers these areas. NAIP imagery is available for 2006, 2007, and 2009 and is leaf-on, full color, 1 meter pixel resolution. The following map titled "Existing Orthoimagery Revised Nov. 23, 2010" shows the final results of the project and accounts for available NAIP imagery.



